Notice of Allowability	Application No.	Applicant(s)	
	10/702,561	SHIZUNO, YOSHINORI	
	Examiner	Art Unit	
	Jasmine J Clark	2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.

2. ☒ The allowed claim(s) is/are *1-14*.

3. ☒ The drawings filed on *07 November 2003* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 11/07/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

JASMINE CLARK
PRIMARY EXAMINER

DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statement filed 11/07/2003 has been fully considered and made of record.

References Cited

2. Saeki (US 6,717,252 B2) shows a structure of a semiconductor device comprising a substrate (region 30A having a first surface and a second surface opposed to the first surface; a semiconductor chip 11 (see Fig. 2) having a third surface and a fourth surface opposed to the third surface, and mounted on the first surface; wherein the semiconductor chip 11 includes: a plurality of electrode pads 12 formed on the third surface, an insulating layer 16 which is formed on the third surface, a plurality of bump electrodes 15 disposed over the insulating layer, wiring 14 formed in the insulating layer to electrically connect the bump electrode to the pads, external terminals 17 disposed on the first surface of the substrate; and a sealing resin 44 for sealing the first surface and the semiconductor chip. However, Saeki fails to teach that the insulating layer which is formed on the third surface and which includes an opening for exposing a part of the surface of each electrode pad having the conductive trace formed on the insulating, and the wiring formed on the insulating layer as the claimed invention.

The references of interest are cited: Please also see Hayashida et al. (US 6,060,768),Schueller (US 5,866,949), Frye et al. (US 5,898,223), Ohsawa et al. (US 6,054,773), Chen et al. (US 6,765,277 B2), Shim et al. (US 6,414,396 B1),

Akram et al. (US 6,407,451 B2), Kim (US 6,380,629 B1), Palagonia (US 5,874,782), Fischer et al. (US 5,701,032)Miura et al. (US 5,565,706), Hashimoto (US 6,414,382 B1), Kwon et al. (US 6,407,459 B2), and Kameyama et al. (US 6,281,570 B1).

Allowable Subject Matter

3. Claims 1-14 are allowed.

The following is an examiner's statement of reasons for allowance: please see the above discussion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Telephone Inquiry Contacts

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine J Clark whose telephone number is (571) 272-1726. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jjbc/08/23/04

JASMINE CLARK
PRIMARY EXAMINER